The Time Machine Factory [unspeakable, speakable] on Time Travel



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Dynamical wormholes in Robinson-Trautman class

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We present wormholes based on the Robinson–Trautman class of spacetimes generally containing geometries without symmetries. We focus on a model sourced by a ghost scalar field investigating its asymptotics, stability and other issues. Within the same family of geometries one can construct a thin-shell model which approaches simple spherically symmetric wormhole in the distant future. The generalization of the second model to higher dimensions provides a possibility of avoiding the energy condition violation.

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